Minnesota Department of Education

Options for General Education Formula Changes to Limit Revenue Disparities

Report to the Legislature

January 2004

As Required by Minnesota Statutes 2003, Section 127A.51

COMMISSIONER

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ESTIMATED COST OF PREPARING THIS REPORT

This report provides information that the Department of Education already collects as part of its normal business functions. The cost information reported below does not include the cost of gathering and analyzing the data but rather is limited to the estimated cost of actually preparing this report document.

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OPTIONS FOR GENERAL EDUCATION FORMULA CHANGES TO LIMIT REVENUE DISPARITIES

Statutory Directive

Minnesota Statutes 2003, Section 127A.51, reads as follows:

> **Section 127A.51 Statewide average revenue.**
>
> By October 1 of each year the commissioner must estimate the statewide average adjusted general revenue per adjusted marginal cost pupil unit and the disparity in adjusted general revenue among pupils and districts by computing the ratio of the 95th percentile to the fifth percentile of adjusted general revenue. The commissioner must provide that information to all districts.
>
> *If the disparity in adjusted general revenue as measured by the ratio of the 95th percentile to the fifth percentile increases in any year, the commissioner shall recommend to the legislature options for change in the general education formula that will limit the disparity in adjusted general revenue to no more than the disparity for the previous school year. The commissioner must submit the recommended options to the education committees of the legislature by January 15. (emphasis added)*
>
> For purposes of this section and section 126C.10, adjusted general revenue means:
>
> (1) for fiscal year 2002, the sum of basic revenue under section 126C.10, subdivision 2; supplemental revenue under section 126C.10, subdivisions 9 and 12; transition revenue under section 126C.10, subdivision 20; referendum revenue under section 126C.17; and equity revenue under section 126C.10, subdivisions 24a and 24b; and
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> (2) for fiscal year 2003 and later, the sum of basic revenue under section 126C.10, subdivision 2; referendum revenue under section 126C.17; and equity revenue under section 126C.10, subdivisions 24a and 24b.

Background

The October 2003 calculations under Minnesota Statutes 2003, Section 127A.51, given in the table below, show an increase in the projected ratio of the 95th percentile to the fifth percentile of adjusted general revenue from 1.186 in FY 2003 to 1.206 in FY 2004. While the 1.206 ratio projected for FY 2004 is lower than in any year between FY 1992, when these calculations were initiated, and FY 2001, it exceeds the ratio computed for FY 2003 and therefore triggers the statutory requirement for the commissioner to "recommend to the legislature options for change in the general education formula that will limit the disparity in adjusted general revenue to no more than the disparity for the previous school year". Preliminary calculations for FY 2005, based on November 2003 forecast data, (reflecting November 2003 operating referendum results), show a slight

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GENERAL EDUCATION REVENUE DISPARITY REPORT, M.S. 127A.51

Estimated General Education Revenue Per Weighted ADM
BASIC + SUPPLEMENTAL + TRANSITION + REFERENDUM + EQUITY REVENUE
TRANSITION REVENUE IS EXCLUDED AFTER FY 2003

		FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
STATE AVERAGES:		3,390	3,398	3,416	3,476	3,541	3,891	4,003	3,980	4,247	4,511	4,688	4,940	5,086
PERCENTILES:	1ST	3,050	3,050	3,050	3,150	3,205	3,440	3,550	3,530	3,740	3,964	4,078	4,604	4,611
	5TH	3,050	3,050	3,050	3,150	3,205	3,469	3,577	3,530	3,740	3,964	4,309	4,604	4,611
	10TH	3,050	3,050	3,050	3,150	3,205	3,488	3,591	3,530	3,762	4,029	4,418	4,611	4,644
	2OTH	3,050	3,050	3,054	3,150	3,222	3,570	3,717	3,744	4,029	4,302	4,465	4,643	4,715
	3OTH	3,056	3,070	3,154	3,182	3,329	3,727	3,828	3,845	4,101	4,343	4,518	4,706	4,843
	4OTH	3,177	3,174	3,189	3,349	3,453	3,814	3,913	3,879	4,140	4,404	4,569	4,788	4,966
	5OTH	3,244	3,257	3,303	3,428	3,507	3,860	3,953	3,897	4,194	4,487	4,635	4,874	5,067
	6OTH	3,373	3,383	3,377	3,471	3,526	3,893	4,001	3,972	4,271	4,525	4,688	4,971	5,147
	7OTH	3,552	3,561	3,561	3,537	3,583	3,949	4,093	4,060	4,418	4,651	4,825	5,092	5,322
	8OTH	3,611	3,626	3,637	3,628	3,645	4,074	4,217	4,203	4,473	4,719	4,873	5,208	5,419
	9OTH	3,901	3,930	3,972	3,960	4,009	4,326	4,402	4,334	4,579	4,926	5,071	5,357	5,478
	95TH	4,181	4,124	4,124	4,109	4,162	4,502	4,684	4,611	4,805	5,025	5,191	5,461	5,560
	99TH	4,839	4,797	4,686	4,676	4,724	5,058	5,131	5,057	5,260	5,471	5,559	5,893	5,994
DOLLAR GAPS:	90TH TO 10TH	851	880	922	810	804	838	811	804	817	897	653	746	834
	95TH TO 5TH	1,131	1,074	1,074	959	957	1,033	1,108	1,081	1,065	1,061	882	858	949
	99TH TO 1ST	1,789	1,747	1,636	1,526	1,519	1,617	1,581	1,527	1,520	1,507	1,481	1,289	1,383
RATIOS:	90TH TO 10TH	1.279	1.289	1.302	1.257	1.251	1.240	1.226	1.228	1.217	1.223	1.148	1.162	1.180
	95TH TO 5TH	1.371	1.352	1.352	1.304	1.299	1.298	1.310	1.306	1.285	1.268	1.205	1.186	1.206
	99TH TO 1ST	1.587	1.573	1.536	1.484	1.474	1.470	1.445	1.433	1.406	1.380	1.363	1.280	1.300

increase in the projected ratio of the 95th percentile to the fifth percentile of adjusted general revenue to 1.209. The increases in the ratio of the 95th percentile to the 5th percentile of adjusted general revenue for FY 2004 and FY 2005, while quite small in relation to the decreases in this ratio between FY 1992 and FY 2003, are attributable to recently enacted increases in referendum allowance limits, which, together with new referendum elections, have increased the high end of the revenue distribution more rapidly than the low end has been increased through changes in the basic formula and the equity revenue formula. Because (1) the projected ratio of the 95th percentile to the 5th percentile of adjusted general revenue is slightly higher in FY 2005 than in FY 2004, (2) changes have already been enacted in general education funding formulas for FY 2005 and later, and (3) FY 2004 will be nearly completed before any potential changes could be enacted, the options prepared for this report were analyzed using the funding formulas in effect for FY 2005 and later, and data as of the November 2003 budget forecast.

Options For General Education Formula Changes to Limit Revenue Disparities

To limit the disparity in adjusted general revenue for FY 2005 and later to no more than the disparity for FY 2003, two general options are available:

1) modifying the current formula for equity revenue, and
2) converting a portion of referendum revenue to basic revenue.

A third possible approach, rolling back recently enacted increases in referendum allowance limits, was not considered a viable option because it would entail leveling down, and several districts have already received voter approval to increase referendum revenues over the next several years in keeping with the new limits.

Modifying the Current Equity Formula

Because the current equity revenue formula was designed specifically to reduce revenue disparities between districts with high and low referendum revenue per pupil unit, changes to the equity revenue formula would provide the simplest and most direct means of limiting revenue disparities.

The current equity revenue formula for FY 2005 and later has two components: 1) a flat allowance of $13 per pupil unit for all districts whose referendum revenue per pupil unit falls below the regional (metro or nonmetro) 95th percentile, and 2) a variable amount, ranging up to $75 per pupil unit on a sliding scale, depending on the gap between the district's referendum revenue per pupil unit and the regional 95th percentile. There are two exceptions: 1) Minneapolis, St Paul and Duluth are ineligible for both categories of equity revenue, and 2) districts without any referendum revenue are ineligible for the variable portion of the equity revenue.

The exclusion of Minneapolis, Saint Paul and Duluth from receiving equity revenue, (while raising other questions about the fairness of the equity revenue formula), does not contribute to the gap between the 95th and 5th percentiles of adjusted general revenue, because both districts have moderate referendum revenue allowances, falling in between the 95th and 5th percentiles. The exclusion of districts with no referendum revenue from

receiving the variable portion of equity revenue directly contributes to the gap between the 95th and 5th percentiles of adjusted general revenue, and has also stimulated several districts to hold referendum elections seeking a $1 per pupil unit referendum allowance in order to qualify for an additional $75 per pupil unit of equity revenue.

Option # 1: Allow Districts with No Referendum Revenue to Receive the Variable Portion of Equity Revenue

This option would increase the equity revenue per pupil unit for districts without referendum revenue from $13 to $88, thereby reducing the FY 2005 ratio the 95th to the 5th percentiles of adjusted general revenue from 1.209 to 1.190 (assuming all affected districts would levy the amount required to qualify for full equity revenue). Option # 1 would increase total equity revenue for FY 2005 by $4,465,000, including $2,600,000 in state aid and $1,865,000 in property tax levy. On an 80-20 appropriations basis, the appropriations required for FY 2005 would be $2,080,000. Because school districts have already levied for FY 2005, there would need to be a double levy the first year.

Option # 1 would nearly bring the revenue disparity ratio down to the FY 2003 level of 1.186, and it would eliminate the current incentive for districts to hold a referendum election for $1 per pupil unit to qualify for the variable portion of equity revenue. There would be no "losers", and 44 districts representing 6.4 percent of the total pupil units in the state would receive an increase. However, it would not, by itself, bring the disparity ratio down to the targeted FY 2003 level.

Option # 2: Increase the Maximum Allowance for the Variable Portion of Equity Revenue to $89, in Combination with Option # 1

The simplest way to bridge the gap from the 1.190 ratio under Option # 1 to the FY 2003 ratio of 1.186 would be to increase maximum allowance for the variable portion of equity revenue from $75 per pupil unit to approximately $89 per pupil unit. Option # 2 would 1) allow districts with no referendum revenue to receive the variable portion of equity revenue, and 2) increase the maximum allowance for the variable portion of equity revenue from $75 to $89. Option # 2 would increase total equity revenue for FY 2005 by $10,662,000, including $5,497,000 in state aid and $5,165,000 in property tax levy. On an 80-20 appropriations basis, the appropriations required for FY 2005 would be $4,398,000. Because school districts have already levied for FY 2005, there would need to be a double levy the first year.

Option # 2 would bring the FY 2005 revenue disparity ratio down to the FY 2003 level of 1.186, and it would eliminate the current incentive for districts hold a referendum election for $1 per pupil unit to qualify for the variable portion of equity revenue. There would be no "losers" ", and 315 districts representing 85.3 percent of the total pupil units in the state would receive an increase. This option would not guarantee that the disparity ratio would remain at 1.186 in later years; the ratios would need to continue to be monitored annually, and adjusted with subsequent legislation, if the goal is to ensure that the disparity ratio for later years does not exceed the FY 2003 ratio. Option # 2 can be expected to generate broad support among school districts, since there are no "losers" and the vast majority of districts would be "winners". However, it is not the lowest cost

option to bring the FY 2005 revenue disparity ratio down to the FY 2003 level of 1.186 without creating "losers", since many districts with revenue above the 5th percentile would also receive an increase.

Option # 3: Add a Second Tier of Equity Revenue Targeted to the Lowest Revenue Districts, in Combination with Option # 1

The lowest cost option to lower the FY 2005 revenue disparity ratio down to the FY 2003 level of 1.186 without creating any "losers" would be to add a second tier of equity revenue targeted to the lowest revenue districts, in combination with Option #1. After calculating the distribution of equity revenue according to Option # 1, districts with adjusted general revenue per pupil unit below 84.3 % of the statewide 95th percentile of adjusted general revenue per pupil unit would receive Tier 2 equity revenue in the amount necessary to bring their adjusted general revenue per pupil unit up to 84.3 % of the statewide 95th percentile. Tier 2 equity revenue would be funded with a mix of state aid and levy, using the same equalizing factor as for Tier 1 equity revenue. Option # 3 would increase total equity revenue for FY 2005 by $5,668,000, including $3,270,000 in state aid and $2,398,000 in property tax levy. On an 80-20 appropriations basis, the appropriations required for FY 2005 would be $2,616,000. Because school districts have already levied for FY 2005, there would need to be a double levy the first year.

Option # 3 would bring the FY 2005 revenue disparity ratio down to the FY 2003 level of 1.186, and it would eliminate the current incentive for districts hold a referendum election for $1 per pupil unit to qualify for the variable portion of equity revenue. There would be no "losers" ", and 70 districts representing 10.8 percent of the total pupil units in the state would receive an increase. By linking Tier 2 equity revenue to the amount needed to ensure that all districts would be able to access 84.3 % of the statewide 95th percentile of adjusted general revenue per pupil unit, this option would guarantee that the disparity ratio would not exceed 1.186 in later years. Because Option # 3 would target revenue increases to the lowest revenue districts, it would be more difficult to generate broad support for this option among school districts than for Option #2. It would also be more complex than Option #2. However, it is significantly lower in cost than Option #2.

Option # 4: Allow Districts with No Referendum Revenue to Receive the Variable Portion of Equity Revenue, Increase the Maximum Allowance for the Variable Portion of Equity Revenue to $102, and Eliminate the Flat $13 Allowance per Pupil Unit Portion of Equity Revenue Formula

Option # 4 would: 1) allow districts with no referendum revenue to receive the variable portion of equity revenue, 2) increase the maximum allowance for the variable portion of equity revenue from $75 to $102, and 3) eliminate the flat $13 allowance per pupil unit portion of the equity revenue formula. This approach would do more to target equity revenue to the lowest revenue districts than the current formula, covering a portion of the cost of increasing equity revenue for districts with the lowest referendum allowances by reducing equity revenue by up to $13 per pupil unit for districts with relatively high referendum allowances. As with the other options, districts not qualifying for equity revenue (Minneapolis, St. Paul, and districts with referendum revenue at or above the regional 95th percentile) would not be affected. Option # 4 would increase total equity

revenue for FY 2005 by $6,077,000. Total equity aid would increase by $3,870,000, and the total equity levy would increase by $2,207,000. On an 80-20 appropriations basis, the increase in appropriation required for FY 2005 would be $3,096,000. Because school districts have already levied for FY 2005, there would need to be a levy adjustment for that year.

Option # 4 would bring the FY 2005 revenue disparity ratio down to the FY 2003 level of 1.186, and it would eliminate the current incentive for districts hold a referendum election for $1 per pupil unit to qualify for the variable portion of equity revenue. One hundred three districts representing 42.5 percent of the state's pupil units would receive less equity revenue than under current law, and 212 districts representing 42.8 percent of the state's pupil units would receive an increase. This option would not guarantee that the disparity ratio would remain at 1.186 in later years; the ratios would need to continue to be monitored annually, and adjusted with subsequent legislation, if the goal is to ensure that the disparity ratio for later years does not exceed the FY 2003 ratio.

Because Option # 4 would create "losers" as well as "winners", it would be more controversial than options 1 – 3, especially if there is no offsetting increase in other formulas. However, it is the only option that would finance a significant portion of the cost of reducing revenue disparities through reallocation of existing equity revenue.

A variation of Option # 4 would be to the reduce the maximum revenue to qualify for equity revenue from the 95th percentile of adjusted general revenue per pupil unit to a lower percentile, so as to fully offset the cost of the increase provided to the lowest revenue districts and thereby make the option revenue-neutral from a state budget perspective. However, such a variation would be even more controversial, since there would be more and bigger "losers". Another variation of Option # 4 would be to add a district's loss in FY 2005 equity revenue onto the district's transition revenue; this revenue would sunset after FY 2008, unless replaced as part of a referendum. However, in the short-term, this variation of Option # 4 would be higher in cost from a state budget perspective.

Converting Referendum Revenue to Basic Revenue

The options discussed above would all limit the disparity in adjusted general revenue by modifying the current formula for equity revenue. A second general approach to limit the disparity in adjusted general revenue would be to convert a portion of referendum revenue to basic revenue. Under this approach, school districts' referendum authorities per pupil unit would be reduced by some designated amount, and the basic formula allowance would be increased by the same amount. This kind of transfer from referendum revenue to basic revenue has been done twice before, with $100 per pupil unit being transferred in FY 1995 and $415 per pupil unit being transferred in FY 2003.

For districts with more than $415 per pupil unit of referendum authority, the FY 2003 transfer was more-or-less revenue neutral: the loss of referendum revenue was close in magnitude to the corresponding gain that was created in basic revenue and the other revenues that are tied to the basic formula allowance. But for districts with less than $415 per pupil unit of referendum authority, the gain exceeded the loss. (Every district

received the extra $415 per pupil unit of basic revenue, even if they had less than $415 per pupil unit of referendum revenue to lose.) As a result, there was a reduction in the funding gap between districts with high referendum authorities and districts with lower authorities. This helps explain why the disparity ratio dropped from 1.205 in FY 2002 to 1.186 in FY 2003.

Option # 5: Allow Districts with No Referendum Revenue to Receive the Variable Portion of Equity Revenue, and Convert $14 per Pupil Unit of Referendum Revenue to Basic Revenue

Option #5 would allow districts with no referendum revenue to receive the variable portion of equity revenue (as in Option # 1), and would transfer $14 per pupil unit from referendum revenue to basic revenue to reach the goal of limiting the ratio of the 95th and 5th percentiles of adjusted general revenue to the FY 2003 level of 1.186. The maximum allowance for the variable portion of equity revenue would remain at $75 per pupil unit.

Under Option # 5, FY 2005 equity revenue would increase by about $4.8 million over current law, referendum revenue would decrease by about $11.6 million, and other general revenue (primarily basic revenue) would increase by about $13.4 million, for a total increase of $6.6 million. Due to the complexities of transferring revenue from the referendum formula, which is based on resident pupil units, to the basic formula, which is based on adjusted pupil units, 17 districts would lose a total of $153,000 under this option; the biggest decrease would be $2 per pupil unit. On the other hand, 326 districts would see a revenue increase; the biggest increase would be $93 per pupil unit. Because basic revenue is funded entirely with state aid, while referendum revenue is funded partly with local levy, this option would increase state aid entitlements by $11,572,000 and reduce local levies by $5,029,000. On an 80-20 appropriations basis, the increase in appropriation required for FY 2005 would be $9,258,000. Because school districts have already levied for FY 2005, there would need to be a levy adjustment for that year.

While each of the five options would increase the state's permanent base budget for schools; Option #5 would raise the state base budget more than the other options because the basic formula is fully funded by the state, while equity revenue is funded with a combination of aid and levy. In addition, there are important policy questions to be considered in converting referendum revenues based on temporary local taxing decisions into permanent state funding commitments. Because of the complexities and policy questions involved in transferring referendum revenue to the basic formula, options involving this type of transfer are generally used only when larger amounts of revenue are being transferred.

Summary Statistics And District By District Impacts

The table below shows the FY 2005 statewide impact of each of the five options discussed above. The appendix provides a district-by-district spreadsheet showing the FY 2005 current law general education revenue per adjusted marginal cost pupil unit (AMCPU), and the change in general education revenue per AMCPU for each district under each of the five options.

DISPARITY RATIO REDUCTION OPTIONS OCT_2003_OPTSUM

SUMMARY 01/05/04

		OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5
REVENUE CHANGES	GAINS	4,465,493	10,662,156	5,667,571	7,509,674	6,696,162
	LOSSES	0	0	0	-1,432,550	-153,176
	NET CHANGE	4,465,493	10,662,156	5,667,571	6,077,123	6,542,986
AID CHANGES	GAINS	2,599,867	5,496,875	3,269,531	4,298,660	11,572,244
	LOSSES	0	0	0	-428,881	0
	NET CHANGE	2,599,867	5,496,875	3,269,531	3,869,779	11,572,244
LEVY CHANGES	GAINS	1,865,626	5,165,280	2,398,039	3,211,013	1,908,068
	LOSSES	0	0	0	-1,003,669	-6,937,326
	NET CHANGE	1,865,626	5,165,280	2,398,039	2,207,344	-5,029,258
# DISTRICTS WITH REVENUE GAINS		44	315	70	212	326
# DISTRICTS WITH REVENUE LOSSES		0	0	0	103	17
DISPARITY RATIO'S 5TH PERCENTILE		4,689	4,703	4,702	4,703	4,703
DISPARITY RATIO'S 95TH PERCENTILE		5,578	5,578	5,578	5,578	5,576
DISPARITY RATIO		1.190	1.186	1.186	1.186	1.186